

A METHOD AND APPARATUS FOR SEGMENTING AN IMAGE USING A  
COMBINATION OF IMAGE SEGMENTATION TECHNIQUES

ABSTRACT OF THE DISCLOSURE

This invention relates to a method and apparatus for segmenting an image  
5 using a combination of image segmentation techniques. More particularly, the  
invention is directed to an improved image segmentation technique for use in an  
image processing system that performs at least two distinct image segmentation  
processes on an image and combines the results to obtain a combined multi-layer  
representation of the image that can be suitably processed. In a specific example,  
10 a block based segmentation technique is performed on an image to generate a  
MRC (mixed raster content) representation -- having foreground, background and  
selector layers. A pixel based segmentation technique is also performed on the  
image to generate rendering hints. The MRC representation and the rendering  
hints are then combined to obtain a four (4) layer representation of the image. The  
15 four layer representation is subsequently processed as required by the image  
processing system, e.g. compressed and stored.